

Date: Tuesday, 9/18/2007 9:11:39 AM
User: Chantal Lavoie

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : STEP EXTRUSION
Job Number : 34694	
Estimate Number : 10058	
P.O. Number : N/A	Part Number : D2622120C
This Issue : 9/18/2007 S.O. No. : N/A	Drawing Number : D2622 REV C1
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A	Drawing Revision : C1
Previous Run : 34016	Material : N/A
Written By :	Due Date : 10/5/2007 Qty: 132 Um: Each
Checked & Approved By :	
Comment : Est. A: 0211.12 New Issue KJ/RF	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: 4609

- a) Extrude as per Dwg D2622 Rev. C
- b) Material: 6061-T6 (QQ-A-200/8)
- c) Minimum yield tensile strength = 35 ksi
- d) Minimum ultimate tensile strength = 38 ksi
- e) Minimum elongation = 8%
- f) Order at 120" longg) Bon L Canada Inc. tool # 897123 Rev. A
- h) To be packed per DSK 066
- i) Pull test to ASTM standard B221 required.
- j) Material certification is required

CL07/09/18

132

2.0	D2622120CP	Extrusion
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 132.0000 Each(s)
Extrusion

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage
Ensure material certification is attached

07/15/24

150

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

Inspect dimension per Dwg D2622
Check Pull test per Dwg D2622 for compliance page attached
Check hardness with Webster tester

QSP019

In Aloc/26 cants

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: A Date: 07/09/26
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 9/18/2007 9:11:39 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP EXTRUSION

Job Number: 34694

Part Number: D2622120C

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

Wm 07/09/25 (15)

6.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

(150) 07/09/26

Job Completion



LA 09-26

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

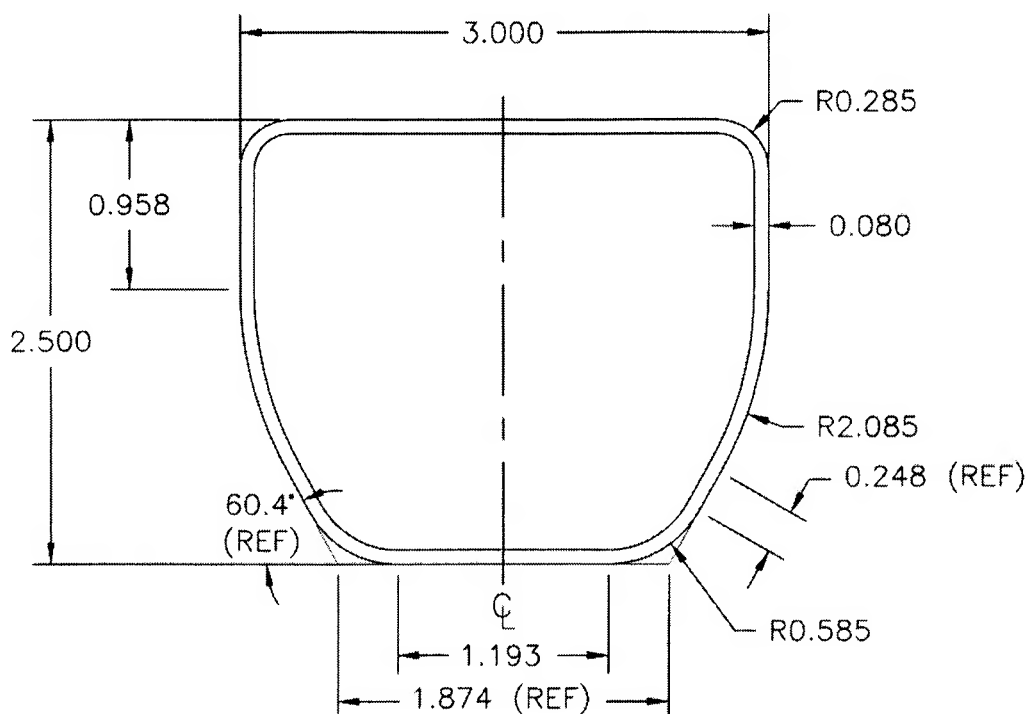
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries




DESIGN KE		DRAWN BY GP		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H		APPROVED H		DRAWING NO. D2622 REV. C SHEET 1 OF 1	
DATE 02.09.11		TITLE STEP EXTRUSION SCALE 1:1			
A	96.11.29	NEW ISSUE			
B	97.12.12	CHANGE MATERIAL, ADD TOL. QSI			
C	02.09.11	0.080 WAS 0.085; ADD PART & DIE No.			
CI	02.10.04	ADD 'REV. A' TO DIE NUMBER.			

RELEASED
02-07-11



1) PART NUMBER IS D2622-XXX WHERE 'XXX' IS CUT LENGTH IN INCHES
(EG. D2622-120 IS 120" LONG)

- 2) MATERIAL 6061-T6 (QQ-A-200/8)
3) MANUFACTURED USING BON-L DIE # 897123 REV. A 
4) A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE MINIMUM MECHANICAL PROPERTIES STATED BELOW:

MINIMUM TENSILE YIELD STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
MINIMUM ELONGATION = 8%

- 5) PART IS SYMMETRIC ABOUT CENTERLINE
6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
7) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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W/O: 34694
C/L 07/09/18

BON L CANADA INC.

THE WILLIAM L. BONNELL COMPANY, INC.
BON L MANUFACTURING COMPANY
SUBSIDIARIES OF TREDEGAR CORPORATION
FILIALES DE LA CORPORATION TREDEGAR



INVOICING COMPANY AND LOCATION
BUREAU DE FACTURATION

BON L CANADA INC
500 EDWARD AVENUE
RICHMOND HIL ON

L4C 4Y9

SHIPPING MANIFEST BORDEREAU D'EXPÉDITION

MANIFEST DATE/DATE D'EXPÉDITION

09-21-07
MANIFEST NUMBER/N° D'EXPÉDITION

600000
SALES ORDER NUMBER/N° DE COMM.

REFER TO
THESE NUMBERS ON
ALL CORRESPONDENCE
RÉFÉREZ-VOUS À CES
NUMÉROS POUR TOUTE
CORRESPONDANCE.

CREDIT REP
REP. DU CRÉDIT
HAMBROOK, PAU
905-508-3250

86881
SALES REP
REP. DES VENTES

FIELD SALES REP
REP. RÉGIONAL DES VENTES
Kutter A
450-435-6551

CUST SERVICE REP
REP. SERVICE CLIENTÈLE
Burton D
905-427-2227

SHIP TO/EXPÉDIE À

DART AEROSPACE LTD.
270 ABERDEEN ST.
HAWKESBURY
6A 1K7

SOLD TO/ENDU À

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY
K6A 1K7

O/P

PHONE 613-632-5200

PHONE 613-632-5200

STOMER ID/N° DU CLIENT ORDER DATE DATE DE LA COMMANDE CUST. PO. NO./N° DE COMM. DU CLIENT JOB/PROJET

46024 09/18/07 4609

LOC/USINE TRAILER NO./N° DE REMORQUE SALESMAN/VENDEUR

RIH 57367 59358

BILL OF LADING NUMBER/N° DE CONNAISSANCEMENT

00358189

EM ID TEM	ORDER QUANTITY QTE COMMANDEE	UNIT UNITÉ	PREVIOUS SHIPPED QTY QTE DÉJÀ EXPÉDIEE	MFG. PART NUMBER N° DE PIÈCE DU FOURNISSEUR	ALLOY & TEMPER ALLIAGE & TREMPÉ	FINISH DESCRIPTION DESC. DE LA FINITION	THIS SHIPMENT/CETTE EXPÉDITION			UNIT UNITÉ	QUANTITY DUE QUANTITÉ PRÉVUE
				CUSTOMER PART NUMBER NUMÉRO DE PIÈCE DU CLIENT	LENGTH LONGUEUR	FABRICATION DESCRIPTION TYPE DE FABRICATION	NO. PKGS N° DE PAQUETS	GROSS WT. POIDS BRUT	NET WT. POIDS NET		
01	132	KG M PC	0 0 0	DAA-897123-1 D2622	5061 /T6 120" 13/16 " 10 "	MILL CERTIFICATE OF COMP (+015-015,0151-0112)	3	652	635 KG 457.20 M 150 PC		0 0 0
				DETAIL; LOT/TICKET		86881010 / 177688 86881010 / 177689 86881010 / 177691	1 1 1	209 209 234	204 204 227		48 PC 48 PC 54 PC
								652	635 KG 457.20 M 150 PC		

NO. B1065 REV. C

RETURN MATERIALS WILL BE ACCEPTED FOR CREDIT WITHOUT PERMISSION
EN RETOUR DE MATÉRIEL NE SERA ACCEPTÉ POUR CRÉDIT SANS AUTORISATION

CUSTOMER
CLIENT

1

TOTALS/TOTAUX

FORMER ACKNOWLEDGEMENT OF GOODS DELIVERED AND CONDITION/RECONNAISSANCE DU CLIENT DU MATÉRIEL LIVRÉ ET DE SA CONDITION

DATE OF DELIVERY/DATE DE LIVRAISON



CERTIFICATE OF COMPLIANCE

BON L CANADA INC

500 EDWARD AVENUE
RICHMOND HILL, ON L4C 4Y9

Cert Date	Cert No	Sales Order	Page
09/21/07	166430	86881	1
Cust PO	B/L No	Lot	Date
4609	00358189	86881010	9/21/07

Sold To	Ship To
46024	46024
DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7	DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Item No	Part No	Item Description	Cust Part
1.000	DAA-897123-1	120" Mill 6061 T6	D2622

Gross Weight	652 KGS
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Net Qty	635 KG	150 PC	457 M	3 PKG
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Specification	Die Desc
AMS-QQ-A-200/8 & ASTM B221-00	

Mechanical Tests:

Test No.	Tensile MPA / KSI	Yield MPA / KSI	%Elongation	Conductivity	Bend/ Drift HREW
1	311.1 / 45.1	293.8 / 42.6	10.0	.0	93

Chemical Analysis:

SI	FE	CU	MN	MG	CR	NI	ZN	GA	V	TI	ZR	OTHER
.66	.24	.28	.05	.89	.05	.007	.07	.000	.009	.02	.000	.00

This will certify that the material described herein has been inspected and tested in accordance with Bon L Canada's standard sampling and testing procedures or in accordance with the requirements of any specifications forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

D. VanBakel, QA Manager Signed for Bon L Canada